ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

xx

Mr. Don L. Hefner
Plant Manager
Corning Incorporated
Post Office Box 1700
Concord, NC 28026

SUBJECT: Air Quality Permit No. 08436T21
Facility ID: 1300117
Corning Incorporated
Midland, North Carolina
Cabarrus County
Fee Class: Title V
PSD Class: Major

Dear Mr. Hefner:

In accordance with your completed Air Quality Permit Applications for a PSD modification and significant modification of your Title V permit received January 30, 2019 and April 1, 2019, respectively, we are forwarding herewith Air Quality Permit No. 08436T21 to Corning Incorporated, 14556 Highway 601 South, Midland, Cabarrus County, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

Pursuant to 15A NCAC 02Q .0203(e), the Permittee shall, in addition to their existing annual fee, be assessed the nonattainment area RACT/LAER fee.

As the designated responsible official, it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215.108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Cabarrus County has triggered increment tracking under PSD for PM_{10} and SO_2. This modification will result in emissions increases of 7.5 lbs/hr for PM_{10} and 0.1 lb/hr for SO_2. In addition, the modification results in emissions increases of 7.5 lbs/hr for $PM_{2.5}$ and 209.6 lbs/hr for NOx; thus, establishing for this County, minor source baseline date of January 30, 2019 for Corning Incorporated for $PM_{2.5}$ and NO_2. The modification establishes for Union County minor source baseline date of January 30, 2019 for Corning Incorporated for NOx due to the emissions increase of 209.6 lbs/hr.

This Air Quality Permit shall be effective from xx until May 31, 2024, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Rahul P. Thaker, P.E. QEP, at (919) 707-8740 or Rahul.Thaker@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Kelly Fortin, EPA Region 4
Mooresville Regional Office
Central Files
Connie Horne (cover letter only)

ATTACHMENT to Air Quality Permit No. 08436T21

Insignificant Activities per 15A NCAC 02Q .0503(8)

ID No.	Emission Source Description
IES-C-1 through IES-C-14 **PSD***	Fourteen house vacuums
IES-CF	Furnace Gas Treatment
IES-C-DGT1 through IES-C-DGT6 **PSD***	Six diesel generator fuel storage tanks (each 6,000 gallons capacity)
IES-C-FPDT1 IES-C-FPDT2 **PSD***	Two fire pump diesel fuel storage tanks (each 300 gallons capacity)
IES-C-FP1 IES-C-FP2 **MACT ZZZZ PSD***	Two diesel fuel-fired fire pumps (each 183 hp engine power output capacity)
IES-C-GC1 through IES-C-GC5 **PSD***	Five glass cleaning processes
IES-C-MFB **PSD***	Maintenance paint spray booth with filter
IES-C-MS1 through IES-C-MS3 **PSD***	Three maintenance solvent sinks
IES-C-DC **PSD***	Die cleaning
IES-C-SV1 through IES-C-SV4 **PSD***	Four soot vacuums
IES-C-FS **PSD***	Fiber stripper operation
IES-C-CWT1 through IES-C-CWT5 **PSD***	Five cooling tower units

NOTE: Insignificant sources are exempt from NO_x RACT (15A NCAC 02D .1402(h)(1)).

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 "Control of Toxic Air Pollutants" or 02Q .0711 "Emission Rates Requiring a Permit."
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide.

* See Section 2.2.B.1. in Air Quality Permit 08436T21 or any subsequent, amended permit(s).

Summary of Changes to the Permit

The following changes were made to the Corning Incorporated – Midland, NC, Air Quality Permit No. 08436T20:

Old Page No. Air Quality Permit No. 08436T20	**New Page No.** Air Quality Permit No. 08436T21	**Condition Number**	**Changes**
Cover Letter Attachment	Cover Letter Attachment	Insignificant Activity List	Revise the list to remove flame gas cut-off exhaust (IES-C-FC2), glass cleaning process (IES-C-GC5), and two soot vacuums (IES-C-SV5 and IES-C-SV6). Add to the list house vacuum (IES-C-14), diesel generator storage tank (IES-C-DGT6), fiber stripper operation (IES-C-FS), and five cooling tower units (IES-C-CWT1 through IES-C-CWt5). Label all insignificant activities as PSD subject sources except IES-CF. Label diesel fired pumps (IES-C-FP1 and IES-C-FP2) as MACT subject sources.
3	3	Section 1 Table	Include new sources (ES-C-012, ES-C-014, ES-C-PG2d, and ES-C-Cleaning). Label all sources PSD subject. Label source ES-C-012 RACT subject and source ES-C-PG2d as both NSPS IIII and MACT ZZZZ subject.
6	5	Section 2.1. A. Section 2.1.A. Table	Include new source ES-C-012. Clearly include all applicable requirements.
7, 8	6, 7	Section 2.1.A.1. and 2.	Include applicability for new source ES-C-012.
8	7	Section 2.1.A.3.a. and c.	Include applicability for new source ES-C-012. Revise the visible monitoring requirement to require reestablishment of "normal" for all existing optical waveguide processes within 30 days of commencement of operation of new source ES-C-012. Require establishment of normal for new source ES-C-012 within 30 days of commencement of operation.
10	9	Section 2.1.A.5.	Revise this requirement to include all provisions of RACT for new source ES-C-012.
10 11	10 10	Section 2.1.B Section 2.1.B. Table	Include new source ES-C-014. Clearly include all applicable requirements.
11 12	10 11	Section 2.1.B.1. and 2.	Include applicability for new source ES-C-014.
12	11	Section 2.1.B.2.c.	Include establishment of "normal" emissions for new source ES-C-014 within 30 days of its commencement.
13	12	Section 2.1.C. Table	Clearly include all applicable requirements.
14	13	Section 2.1.D.	Include new source ES-C-PG2d.

Old Page No. Air Quality Permit No. 08436T20	**New Page No.** Air Quality Permit No. 08436T21	**Condition Number**	**Changes**
14	13	Section 2.1.D. Table	Clearly include all applicable requirements.
15	14	Section 2.1.D.2.	Include applicability for new source ES-C-PG2d.
15	14	Section 2.1.D.3.	Include applicability for new source ES-C-PG2d. Clearly include all applicable requirements for NSPS IIII for affected units.
18	18	Section 2.1.D.4.	Include applicability for new source ES-C-PG2d.
19 19	18 19	Section 2.1.E. Section 2.1.E Table	Include new source ES-C-Cleaning. Clearly include all applicable requirements.
21	20	Section 2.1.F. Table	Clearly include all applicable requirements.
23	22	Section 2.1.G. Table	Clearly include all applicable requirements.
29 NA	27 28	Section 2.2.A Section 2.2.A. Table	Include all existing and new optical waveguide processes, all existing and new glass drying operations, and existing miscellaneous small exhausts source. Include applicability of 02D .1100.
30	29	Section 2.2.A.1.b.	Include a stack testing requirement to verify the approved emissions limits for chlorine and HCl. Require, as applicable, revisions to the liquid injection rate for each scrubber, included in Section 1 Table, after DAQ approval of stack test results.
30	-	Section 2.2.A.1.f.	Remove this requirement – MRO agreed to remove it.
32	31	Section 2.2.A.1.j.	Remove identification of instances of all deviations for this state-only (air toxics) requirement. It may be okay to require a semi-annual reporting for this state-only requirement. But, it is not okay to require identification of instances of all deviations for this air toxics requirement. The state regulation does not simply include this kind of provision.
38	-	Section 2.2.G.1	Remove applicability of 02Q .0504 for the previously approved changes requiring a 2nd step application using the significant modification process. This PSD application supersedes the changes included in the 2nd step application as the content of that application is dated; thus, there is no need to continue requiring a 2nd step application. Thus, the separately submitted 2nd step significant modification application's processing is not required, and it will simply be consolidated into the PSD application for administrative purpose without any processing.
31	32	Section 2.2.B. Table	Include applicability of 02D .0530 and .1806, and 02Q .0711.

Old Page No. Air Quality Permit No. 08436T20	**New Page No.** Air Quality Permit No. 08436T21	**Condition Number**	**Changes**
NA	30 through 37	Section 2.2.B.1.	Include this new requirement for PSD.
31	37	Section 2.2.B.2.	Renumber this odor requirement as Section 2.2.B.2.
NA	38	Section 2.2.B.3.	Include this new requirement under 02Q .0711.
31 through 38	-	Sections 2.2.C., D., E., F., and G.	Remove these Sections in entirety, as they are non-applicable now with the processing of the PSD application.
38	38	Section 2.3.A.1.	Include a non-compliance statement as §112(r) is an applicable requirement under Part 70.

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
08436T21	08436T20	xx	May 31, 2024

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: Corning Incorporated

Facility ID: **1300117**

Facility Site Location: **14556 Highway 601 South**
City, County, State, Zip: **Midland, Cabarrus County, North Carolina, 28107**

Mailing Address: **P. O. Box 1700**
City, State, Zip: **Concord, North Carolina, 28026**

Application Number: **1300117.19A, 1300117.19B**
Complete Application Date: **January 30, 2019, April 1, 2019**

Primary SIC Code: **3229**
Division of Air Quality, Regional Office Address: **Mooresville Regional Office**
610 East Center Ave.
Mooresville, North Carolina 28115

Permit issued this the xx.

_____
William D. Willets, P.E., Chief, Air Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

SECTION 1- PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
5, 27, 30	ES-C-002 **RACT** **CAM** **PSD**	Optical waveguide laydown process with gas-oxy firing	CD-C-BH-2	One cartridge filter (maximum air-to-cloth ratio of 2.34:1)
10, 27, 30	ES-C-003 **PSD**	Glass drying operation	CD-C-CL-3 CD-C-CL-4	One of two packed tower scrubbers (minimum liquid injection rate of 285 gallons per minute, each)
12, 27, 30	ES-C-004 **PSD**	Miscellaneous small source exhausts (including, but not limited to, laboratory hoods, the acid tank vent, emergency relief rupture discs, emergency vents, chlorine cylinder change out/header maintenance and bulk tank vents)	CD-C-HCL-3 CD-C-HCL-4	One of two vertical spray chamber/venturi wet scrubbers (minimum liquid injection rate of 735 gallons per minute, each)
5, 27, 30	ES-C-001 ES-C-005 **RACT** **CAM** **PSD**	Two optical waveguide laydown processes with gas-oxy firing	CD-C-BH-6 CD-C-HCL-5 or CD-C-HCL-6 CD-C-CL-5 or CD-C-CL-6	One bagfilter (minimum of 53,080 square feet of filter area on-line) in series with One of two sieve tray scrubbers operating in parallel (minimum liquid injection rate of 41 gallons per minute, each) in series with One of two sieve tray scrubbers operating in parallel (minimum liquid injection rate of 25 gallons per minute, each)
5, 27, 30	ES-C-006 **RACT** **CAM** **PSD**	Optical waveguide laydown process with gas-oxy firing	CD-C-BH-7	One bagfilter (maximum air-to-cloth ratio of 2.61:1)
10, 27, 30	ES-C-007 **PSD**	Glass drying operation	CD-C-CL-8 CD-C-CL-9 CD-C-CL-10	Two of three packed tower scrubbers operating in parallel (minimum liquid injection rate of 285 gallons per minute, each)
5, 27, 30	ES-C-009 **RACT** **CAM** **PSD**	Optical waveguide laydown process with gas-oxy firing	CD-C-BH-7 CD-C-BH-10	One bagfilter (maximum air-to-cloth ratio of 2.61:1) and one bagfilter (maximum air-to-cloth ratio of 0.88:1)

Page Nos.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
10, 27, 30	ES-C-010 **PSD** ES-C-011 **PSD**	Two glass drying operations	CD-C-CL-8 CD-C-CL-9 CD-C-CL-10	Two of three packed tower scrubbers operating in parallel (minimum liquid injection rate of 285 gallons per minute, each)
5, 27, 30	ES-C-012 **RACT** **PSD**	Optical waveguide laydown process with gas-oxy firing	CD-C-BH-11	One bagfilter (maximum air-to-cloth ratio of 0.90:1)
10, 27, 30	ES-C-014 **PSD**	Glass drying operation	CD-C-CL-8 CD-C-CL-9 CD-C-CL-10	Two of three packed tower scrubbers operating in parallel (minimum liquid injection rate of 285 gallons per minute, each)
20, 30	ES-C-SHP1 **PSD**	Soot handling system, Silo 1	CD-C-BH-3	One bin vent filter (985 square feet of filter area)
20, 30	ES-C-SHP2 **PSD**	Soot handling system, Silo 2	CD-C-BH-4	One bin vent filter (985 square feet of filter area)
20, 30	ES-C-SHP3 **PSD**	Soot handling system, Bagging Operations	CD-C-BH-5	One bin vent filter (1,261 square feet of filter area)
18, 30	ES-C-ACP **PSD**	Acrylate coating process	NA	NA
22, 30	ES-C-HB1a ES-C-HB1b **RACT** **MACT DDDDD** **PSD**	Two natural gas-fired humidification boilers (each 5.02 million Btu per hour maximum heat input rate)	NA	NA
22, 30	ES-C-HB2a ES-C-HB2b **RACT** **MACT DDDDD** **PSD**	Two natural gas-fired humidification boilers (each 8.37 million Btu per hour maximum heat input rate)	NA	NA
13, 30	ES-C-PG1a* ES-C-PG1b* **MACT ZZZZ** **PSD**	Two diesel-fired emergency generators (each 2,000 kW electric power output capacity, each 2,935 HP engine power output capacity)	NA	NA
13, 30	ES-C-PG2a* **MACT ZZZZ** **PSD**	One diesel-fired emergency generator (2,000 kW electric power output capacity, 2,935 HP engine power output capacity)	NA	NA
13, 30	ES-C-PG2b* ES-C-PG2c* ES-C-PG2d* **NSPS IIII** **MACT ZZZZ** **PSD**	Three diesel-fired emergency generators (each 2,000 kW electric power output capacity, each 2,935 HP engine power output capacity)	NA	NA
18, 30	ES-C-Cleaning **PSD**	Miscellaneous maintenance and cleaning	NA	NA

NOTES:

* Emergency generators and fire pumps – Exempt from NOx RACT (15A NCAC 02D .1402(h)(3) and (4)).

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Two optical waveguide laydown processes (ID Nos. ES-C-001 and ES-C-005) with gas-oxy firing with associated bagfilter (ID No. CD-C-BH-6) in series with one of two sieve tray scrubbers operating in parallel (ID Nos. CD-C-HCL-5 or CD-C-HCL-6) in series with one of two sieve tray scrubbers operating in parallel (ID Nos. CD-C-CL-5 or CD-C-CL-6)

One optical waveguide laydown process (ID No. ES-C-002) with gas-oxy firing with associated cartridge filter (ID No. CD-C-BH-2)

One optical waveguide laydown process (ID No. ES-C-006) with gas-oxy firing with associated bagfilter (ID No. CD-C-BH-7)

One optical waveguide laydown process (ID No. ES-C-009) with gas-oxy firing with associated bagfilters (ID Nos. CD-C-BH-7 and CD-C-BH-10)

One optical waveguide laydown process (ID No. ES-C-012) with gas-oxy firing with associated bagfilter (ID No. CD-C-BH-11)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For P less than 30 tons per hour: $E=4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour, and For P greater than 30 tons per hour: $E=55.0 \times P^{0.11} - 40$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
PM, PM_{10}, $PM_{2.5}$, NOx, and VOCs	See Section 2.2.B.1.	15A NCAC 02D .0530
Particulate Matter	See Section 2.1.A.4. (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, and ES-C-009)	15A NCAC 02D .0614
Toxic Air Pollutants	State-enforceable only See Section 2.2.A.1. (ID Nos. ES-C-001 and ES-C-005 only)	15A NCAC 02D .1100
Nitrogen Oxides	See Section 2.1.A.5.	15A NCAC 02D .1413
Odors	State-enforceable only See Section 2.2.B.2.	15A NCAC 02D .1806

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutants	See Section 2.2.B.3.	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012) shall not exceed an allowable emission rate as calculated by the following equations:

For process weights up to 30 tons per hour:

$E = 4.10 \times P^{0.67}$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

For process weights greater than 30 tons per hour:

$E = 55 \times P^{0.11} - 40$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.A.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from these sources (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012) shall be controlled by associated bagfilters and cartridge filter (ID Nos. CD-C-BH-1, CD-C-BH-2, CD-C-BH-6, CD-C-BH-7, CD-C-BH-10, and CD-C-BH-11) as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the equipment manufacturer and/or established by the Permittee via operational experience. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the established inspections and maintenance requirements are not conducted.

d. The results of inspections and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each inspection;
   iii. The results of any maintenance performed on any control device; and
   iv. Any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.A.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012).

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources **(**ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.A.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012) for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for emission source (ID No. ES-C-012) in the first 30 days following the commencement of operation. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (EPA Method 9) for 12 minutes is below the limit given in Section 2.1 A.3.a. above.

   If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

d. The results of the observations shall be maintained in a logbook (written or electronic form) on site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

a. For these sources (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, and ES-C-009), the Permittee shall comply with 40 CFR Part 64 and 15A NCAC 02D .0614 and shall ensure that these emission sources comply with the emission limits of 15A NCAC 02D .0515 by complying with Section 2.1 A.4.b below.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

b. Particulate matter emissions from these sources (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, and ES-C-009) shall be controlled by associated bagfilters or cartridge filter (ID Nos. CD-C-BH-1, CD-C-BH-2, CD-C-BH-6, CD-C-BH-7, and CD-C-BH-10) as described above.
   i. To ensure compliance, the Permittee shall continuously monitor the differential pressure drops across the bagfilters and cartridge filter and record the pressure drop data at least once every 15 minutes via an electronic parametric monitoring system that notifies the operator of any out-of-range values. The Permittee shall install, maintain, operate and calibrate the differential pressure drop monitoring system, as recommended by the monitoring equipment manufacturer. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614 if this monitoring is not conducted or if the parametric monitoring system is not calibrated and maintained.
   ii. If a differential pressure drop across a bagfilter or cartridge filter less than 0.5 inches of water column or greater than 14 inches of water column is observed then an excursion has occurred.
      A. In the event of an excursion, the Permittee shall take appropriate action to correct the excursion as soon as practicable.
      B. Based on the results of the approved monitoring, the permitting authority may require the owner or operator to develop and implement a Quality Improvement Plan in accordance with 40 CFR §64.8.

      The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614 if the Permittee does not comply with Sections 2.1.A.4.b.ii.A. and B.
   iii. The results of monitoring, inspections, maintenance and calibrations conducted pursuant to Sections 2.1.A. 4. b. i., and ii. above, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
      A. The date and time of each recorded action;
      B. The results of the differential pressure drop monitoring, noting any excursions along with any corrective actions taken to reduce differential pressure drop;

C. The results of any inspections or maintenance performed on the bagfilters, cartridge filter or differential pressure drop monitoring system; and
D. Any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f) and 40 CFR 64.9]

c. The Permittee shall submit a summary report of the monitoring postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.
The report shall also include the following information, as applicable:
i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

5. 15A NCAC 02D .1413: SOURCES NOT OTHERWISE LISTED IN THIS SECTION

a. The owner or operator of any source of nitrogen oxides, except boilers, indirect-fired process heaters, stationary combustion turbines, or stationary internal combustion engines, at a facility that has the potential to emit 100 tons per year or more of nitrogen oxides or 560 pounds per calendar day or more from May 1 through September 30 shall apply RACT.
b. The Director has approved the proposed RACT limitation and finds gas-oxy burners are RACT for these sources (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, and ES-C-009) and RACT is no additional control. If the Permittee does not comply with the requirements in this Section 2.1.A.1.5.b., the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1413.
c. The Permittee shall comply with the RACT of 45.6 lbs/hr for NOx emissions from optical waveguide laydown process (ID No. ES-C-012), upon start-up, using a gas-oxy firing technology, during all periods of operation (normal, startup, shutdown, and malfunctions.

Testing [15A NCAC 02Q .0508(f)]

i. Compliance with the stack testing requirement for optical waveguide laydown process (ID No. ES-C-012) in Section 2.2.B.1.e. below shall ensure compliance with the RACT for this source. If emissions testing in Section 2.2.B.1.e.v. below is not performed for the source, or the results of the test are above the limit given in Section 2.1.A.5.c. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1413.

Monitoring/Record keeping/Reporting [15A NCAC 02Q .0508(f)]

ii. (A) Reporting requirements in Section 2.2.B.1.m. below for optical waveguide laydown process (ID No. ES- ES-C-012) shall be sufficient to ensure compliance with the RACT requirement in 15A NCAC 02D .1413.
(B) NOTIFICATION - Pursuant to 15A NCAC 02Q .0203(e), the Permittee shall, in addition to their existing annual fee, be assessed the nonattainment area RACT/LAER fee. Within 15 days after the commencement of operation of optical waveguide laydown process (ID No. ES-C-012), the Permittee shall notify the Mooresville Regional Office in writing.

B. Glass drying operations (ID No. ES-C-003) with associated one of two packed tower scrubbers (ID Nos. CD-C-CL-3 or CD-C-CL-4)

Glass drying operations (ID No. ES-C-007) with associated two of three packed tower Cl scrubbers operating in parallel (ID Nos. CD-C-CL-8, CD-C-CL-9 or CD-C-CL-10)

Glass drying operations (ID No. ES-C-010) with associated two of three packed tower Cl scrubbers operating in parallel (ID Nos. CD-C-CL-8, CD-C-CL-9 or CD-C-CL-10)

Glass drying operations (ID No. ES-C-011) with associated two of three packed tower Cl scrubbers operating in parallel (ID Nos. CD-C-CL-8, CD-C-CL-9 or CD-C-CL-10)

Glass drying operations (ID No. ES-C-014) with associated two of three packed tower Cl scrubbers operating in parallel (ID Nos. CD-C-CL-8, CD-C-CL-9 or CD-C-CL-10)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For P less than 30 tons per hour: $E=4.10 \times P^{0.67}$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour, and For P greater than 30 tons per hour: $E=55.0 \times P^{0.11} - 40$ Where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
PM, PM_{10}, $PM_{2.5}$	See Section 2.2.B.1.	15A NCAC 02D .0530
Toxic Air pollutants	State-enforceable only See Section 2.2.A.1.	15A NCAC 02D .1100
Odors	State-enforceable only See Section 2.2.B.2.	15A NCAC 02D .1806
Toxic Air Pollutants	See Section 2.2.B.3.	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources (ID Nos. ES-C-003, ES-C-007, ES-C-010, ES-C-011, and ES-C-014) shall not exceed an allowable emission rate as calculated by the following equations:

For process weights up to 30 tons per hour:

$E = 4.10 \times P^{0.67}$
Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

For process weights greater than 30 tons per hour:

$E = 55 \times P^{0.11} - 40$

Where E = allowable emission rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.B.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from these sources (ID Nos. ES-C-003, ES-C-007, ES-C-010, ES-C-011, and ES-C-014) shall be controlled by associated packed tower scrubbers (ID Nos. CD-C-CL-3, CD-C-CL-4, CD-C-CL-8, CD-C-CL-9 or CD-C-CL-10) as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the equipment manufacturer and/or established by the Permittee via operational experience.
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the established inspections and maintenance requirements are not conducted.

d. The results of inspections and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each inspection;
   iii. The results of any maintenance performed on any control device; and
   iv. Any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources (ID Nos. ES-C-003, ES-C-007, ES-C-010, ES-C-011, and ES-C-014) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.B.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (ID Nos. ES-C-003, ES-C-007, ES-C-010, ES-C-011, and ES-C-014) for any visible emissions above normal. The Permittee shall reestablish "normal" emissions for the glass drying operations (ID Nos. ES-C-003, ES-C-007, ES-C-010, and ES-C-011) by observing stack emissions within 30 days of beginning operation

of glass drying operation (ID No. ES-C-014). The Permittee shall establish "normal" for the emission source (ID No. ES-C-014) in the first 30 days following the commencement of operation. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:

i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (EPA Method 9) for 12 minutes is below the limit given in Section 2.1.B.3.a, above.

If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

d. The results of the observations shall be maintained in a logbook (written or electronic form) on site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

C. Miscellaneous small source exhausts (including, but not limited to, laboratory hoods, the acid tank vent, emergency relief rupture discs, emergency vents, chlorine cylinder change out/header maintenance and bulk tank vents; ID No. ES-C-004) with associated one of two vertical spray chamber/venturi wet scrubbers (ID Nos. CD-C-HCL-3 and CD-C-HCL-4)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ Where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
PM, PM_{10}, $PM_{2.5}$	See Section 2.2.B.1.	15A NCAC 02D .0530
Toxic Air Pollutants	State-enforceable only See Section 2.2.A.1	15A NCAC 02D .1100
Odors	State-enforceable only See Section 2.2.B.2	15A NCAC 02D .1806
Toxic Air Pollutants	See Section 2.2.B.3.	15A NCAC 02Q .0711

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from this source (ID No. ES-C-004) shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$

Where: E = allowable emission rate in pounds per hour; and
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.C.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate matter emissions from this source (ID No. ES-C-004).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from this source (ID No. ES-C-004) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.C.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from this source (ID No. ES-C-004).

D. Six diesel fuel-fired emergency generators (ID Nos. ES-C-PG1a, ES-C–PG1b, ES-C-PG2a, ES-C-PG2b, ES-C–PG2c, and ES-C-PG2d)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur Dioxide	2.3 pounds per million Btu heat input (ID Nos. ES-C-PG1a, ES-C-PG1b, and ES-C-PG2a only)	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
Various	See Section 2.1.D.3. (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d only)	15A NCAC 02D .0524 (40 CFR 60, Subpart IIII)
PM, PM_{10}, $PM_{2.5}$, NOx, and VOCs	See Section 2.2.B.1.	15A NCAC 02D .0530

Regulated Pollutant	Limits/Standards	Applicable Regulation
Hazardous Air Pollutants	See Section 2.1.D.4.	15A NCAC 02D .1111 (40 CFR 63, Subpart ZZZZ)
Odors	State-enforceable only See Section 2.2.B.2.	15A NCAC 02D .1806

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources (ID Nos. ES-C-PG1a, ES-C-PG1b, and ES-C-PG2a) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of diesel fuel in these sources (ID Nos. ES-C-PG1a, ES-C-PG1b, and ES-C-PG2a).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources (ID Nos. ES-C-PG1a, ES-C-PG1b, ES-C-PG2a, ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.D.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of diesel fuel in these sources (ID Nos. ES-C-PG1a, ES-C-PG1b, ES-C-PG2a, ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d).

3. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

a. The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," 40 CFR Part 60 Subpart IIII, including Subpart A "General Provisions."

Emission Standards

b. The emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, ES-C-PG2d) shall be certified to meet the following, applicable emission standards for new nonroad compression ignition (CI) engines for the same

model year and maximum engine power in 40 CFR 89.112 for all pollutants beginning in model year 2007.

NMHC and NOx (combined): 6.4 g/kW-hr (4.77 g/HP-hr)
CO: 3.5 g/kW-hr (2.60 g/HP-hr)
PM: 0.20 g/kW-hr (0.15 g/HP-hr)

[40 CFR 60.4205(b) and 40 CFR 60.4202(a)(2)]

c. Beginning October 1, 2010, the Permittee shall use diesel fuel in these emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, ES-C-PG2d) engines that meets the following requirements as specified in 40 CFR 80.510(b), except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]
   i. a maximum sulfur content of 15 ppm; and
   ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

Testing [15A NCAC 02Q .0508(f)]

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Sections 2.1.D.3.b. and c. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

e. The emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) shall be equipped with a non-resettable hour meter prior to startup. If the emergency generators are not equipped with a non-resettable hour meter prior to startup, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. [40 CFR 60.4209(a)]
f. If the emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) are equipped with diesel particulate filters to comply with the emission standards in Section 2.1.D.3.b. above, the Permittee shall install a backpressure monitor on each diesel particulate filter that notifies the Permittee when the high backpressure limit of the engine is approached. If the diesel particulate filters are not equipped with backpressure monitors or the Permittee is not monitoring the backpressure of the diesel particulate filters, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. [40 CFR 60.4209(b)]
g. The Permittee shall comply with the following, except as allowed under Section 2.1.D.3.j. below:
   i. operate and maintain the stationary CI internal combustion engine (ICE) and control device according to the manufacturer's emission-related written instructions;
   ii. change only those emission-related settings that are permitted by the manufacturer; and
   iii. meet the requirements of 40 CFR parts 89, 94 and/or 1068, as applicable.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if requirements in this Section 2.1.D.3.g. are not complied with, except as allowed under Section 2.1.D.3.j. below. [40 CFR 60.4206 and 60.4211(a)]
h. The Permittee shall comply with the emission standards specified in Section 2.1.D.3.b. above by purchasing the emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) for the model year 2007 and later, certified to meet the emission standards in Section 2.1.D.3.b. above for the same model year and maximum engine power. These engines shall be installed and configured according to the manufacturer's specifications, except as allowed under Section 2.1.D.3.j. below. If the installed CI engines are not certified to meet the emission standards in Section 2.1.D.3.b. above or the CI engines are not configured according to the manufacturer's specifications, except as allowed under Section 2.1.D.3.j. below, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524. [40 CFR 60.4211(c)]
i. The Permittee shall operate the emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) in accordance with Section 2.1 D.3.i.i. through iii below. In order for the engine to be considered an emergency stationary ICE under this Subpart, any operation other than emergency operation,

maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in Section 2.1.D 3.i.i. through iii. below, is prohibited. If the Permittee does not operate the engine according to the requirements in Section 2.1 D.3.i.i. through iii below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

i. There is no time limit on the use of emergency stationary ICE in emergency situations.

ii. The Permittee may operate the emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) for any combination of the purposes specified in 40 CFR 60.4211(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by in 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph 40 CFR 60.4211(f)(3).

A. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

B. Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

C. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211 (f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

A. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(4) The power is provided only to the facility itself or to support the local transmission and distribution system.

(5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if the Permittee does not comply with requirements in Section 2.1. D.3.i. [40 CFR 60.4211(f)]

j. If the Permittee does not install, configure, operate, and maintain the emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) and any associated control device according to the manufacturer's

emission-related written instructions or changes emission-related settings in a way that is not permitted by the manufacturer, the Permittee shall demonstrate compliance as follows:

i. keep a maintenance plan and records of conducted maintenance.
ii. maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, to the extent practicable.
iii. conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the Permittee changes emission-related settings in a way that is not permitted by the manufacturer. The Permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if the Permittee does not comply with requirements in Section 2.1.D.3.j, if applicable. [40 CFR 60.4211(g)]

k. Starting with the model years in Table 5 to NSPS Subpart IIII, if the emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) do not meet the standards applicable to non-emergency engines in the applicable model year, the Permittee shall keep records of the operation of the engines in emergency and non-emergency service that are recorded through the non-resettable hour meter. The Permittee shall record the time of operation of the engines and the reason the engines were in operation during that time. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if these records are not maintained. [40 CFR 60.4214(b)]
l. If the emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) are equipped with diesel particulate filters, the Permittee shall keep records of any corrective action taken after the backpressure monitors have notified the Permittee that the high backpressure limits of the engines are approached. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524, if these records are not maintained. [40 CFR60.4214(c)]

Reporting [15A NCAC 02Q .0508(f)]

m. No initial notifications under 40 CFR 60.7(a)(1) and (a)(3) are required for an emergency use of the emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d). [40 CFR 60.4214(b)]
n. If the emergency generators (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) operate or are contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 60.4211(f)(2)(ii) and (iii) or that operate for the purposes specified in 40 CFR 60.4211(f)(3)(i), the Permittee must submit an annual report according to the requirements in Section 2.1.D.3.n.i. through iii. below:
    i. The report must contain the following information:
        A. Company name and address where the engine is located.
        B. Date of the report and beginning and ending dates of the reporting period.
        C. Engine site rating and model year.
        D. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
        E. Hours operated for the purposes specified in 40 CFR 60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 60.4211(f)(2)(ii) and (iii).
        F. Number of hours the engine is contractually obligated to be available for the purposes specified in 40 CFR 60.4211(f)(2)(ii) and (iii).
        G. Hours spent for operation for the purposes specified in 40 CFR 60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in 40 CFR 60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
    ii. The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

iii. The annual report must be submitted electronically using the Subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this Subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in 40 CFR 60.4.

[40 CFR 60.4214(d)]

o. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

a. These sources (ID Nos. ES-C-PG1a, ES-C-PG1b, ES-C-PG2a, ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) are subject to Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart ZZZZ "National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)."

b. These sources (ID Nos. ES-C-PG1a, ES-C-PG1b, and ES-C-PG2a) are considered existing stationary RICE, pursuant to 40 CFR 63.6590(a)(1)(i), for the purposes of Subpart ZZZZ. Pursuant to 40 CFR 63.6590(b)(3)(iii), these sources do not have to meet the requirements of 40 CFR Part 63, Subparts ZZZZ or A "General Provisions." (i.e. an initial notification is not required for these sources). [40 CFR 63.6590(b)(3)(iii)]

c. These sources (ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d) are considered new stationary RICE, pursuant to 40 CFR 63.6590(a)(2)(i), for the purposes of Subpart ZZZZ. These sources are not required to meet the requirements of 40 CFR Part 63, Subparts ZZZZ or A "General Provisions," except that an initial notification is required pursuant to 40 CFR 63.6645(f) for these sources. Pursuant to 40 CFR 63.6645(c) and (f), and §63.9(b)(2)(i) through (v), the Permittee shall submit an initial notification for each source, no later than 120 calendar days after commencing construction of each source. The notification shall include the following:

i. The name and address of the owner or operator;
ii. The address (i.e., physical location) of the affected source;
iii. An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
iv. A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted;
v. A statement of whether the affected source is a major source or an area source; and
vi. A statement that the stationary RICE have no additional requirements and explain the basis of the exclusion (i.e. that they operate exclusively as emergency stationary RICE, have site ratings of more than 500 brake horsepower and are located at a major source of HAP emissions).

[40 CFR 63.6590(b)(1)(i)]

E. Acrylate coating process (ID No. ES-C-ACP)
Miscellaneous maintenance and cleaning operations (ID No. ES-C-Cleaning)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
VOCs	See Section 2.2.B.1.	15A NCAC 02D .0530
VOCs	See Section 2.1.E.1.	15A NCAC 02D .0958

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	State-enforceable only See Section 2.2.B.2	15A NCAC 02D .1806
Toxic Air Pollutants	See Section 2.2.B.3.	15A NCAC 02Q .0711

1. 15A NCAC 02D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS

a. Pursuant to 15A NCAC 02D .0958, for all sources that use volatile organic compounds (VOC) as solvents, carriers, material processing media, or industrial chemical reactants, or in similar uses that mix, blend, or manufacture VOCs, or emit VOCs as a product of chemical reactions, the Permittee shall:
   i. Store all material, including waste material, containing VOCs in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
   ii. Clean up spills of VOCs as soon as possible following proper safety procedures,
   iii. Store wipe rags containing VOCs in closed containers,
   iv. Not clean sponges, fabric, wood, paper products, and other absorbent materials with VOCs,
   v. Transfer solvents containing VOCs used to clean supply lines and other coating equipment into closable containers and close such containers immediately after each use, or transfer such solvents to closed tanks, or to a treatment facility regulated under section 402 of the Clean Water Act,
   vi. Clean mixing, blending, and manufacturing vats and containers containing VOCs by adding cleaning solvent and close the vat or container before agitating the cleaning solvent.
   The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment facility regulated under section 402 of the Clean Water Act. [15A NCAC 02D .0958(c)]

b. When using a parts-cleaning machine that utilizes a solvent containing a VOC, the Permittee shall:
   i Flush parts in the freeboard area,
   ii. Take precautions to reduce the pooling of solvent on and in the parts,
   iii. Tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has stopped, whichever is longer,
   iv. Not fill cleaning machines above the fill line,
   v. Not agitate solvent to the point of causing splashing. [15A NCAC 02D .0958(d)]

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. To ensure compliance with Section 2.1.E.1.a. and b. above, the Permittee shall, at a minimum, perform a visual inspection once per month of all operations and processes utilizing VOCs. The inspections shall be conducted during normal operations. If the required inspections are not conducted the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0958.

d. The results of the inspections shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each inspection; and
   ii. The results of each inspection noting whether or not noncompliant conditions were observed.
   If the required records are not maintained the Permittee shall be deemed to be in noncompliance with rule 15A NCAC 02D .0958.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

F. Soot Handling System, Silo 1 (ID No. ES-C-SHP1) with associated bin vent filter (ID No. CD-C-BH-3)

Soot Handling System, Silo 2 (ID No. ES-C-SHP2) with associated bin vent filter (ID No. CD-C-BH-4)

Soot Handling System, Bagging Operations (ID No. ES-C-SHP3) with associated bin vent filter (ID No. CD-C-BH-5)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	$E = 4.10 \times P^{0.67}$ Where: E = allowable emission rate in pounds per hour P = process weight rate in tons per hour	15A NCAC 02D .0515
Visible Emissions	20 percent opacity	15A NCAC 02D .0521
PM, PM_{10}, $PM_{2.5}$	See Section 2.2.B.1.	15A NCAC 02D .0530
Particulate Matter	Operate no more than 2,900 hours per 12-consecutive months (ID No. ES-C-SHP3 only)	15A NCAC 02Q .0317 (CAM Avoidance)

1. 15A NCAC 02D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources (ID Nos. ES-C-SHP1, ES-C-SHP2, and ES-C-SHP3) shall not exceed an allowable emission rate as calculated by the following equation:

$E = 4.10 \times P^{0.67}$

Where: E = allowable emission rate in pounds per hour; and
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 F.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. Particulate matter emissions from these sources (ID Nos. ES-C-SHP1, ES-C-SHP2, and ES-C-SHP3) shall be controlled by bin vent filters (ID Nos. CD-C-BH-3, CD-C-BH-4, and CD-C-BH-5) as described above. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there are no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. A monthly visual inspection of the system ductwork and material collection units for leaks; and
   ii. An annual (for each 12-month period following the initial inspection) internal inspection of the bin vent filters for structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if the ductwork and bin vent filters are not inspected and maintained.

d. The results of inspections and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each inspection;
   iii. The results of any maintenance performed on the bin vent filters; and
   iv. Any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0515 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources (ID Nos. ES-C-SHP1, ES-C-SHP2, and ES-C-SHP3) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.F.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

c. To ensure compliance, once a month the Permittee shall observe the emission points of these sources (ID Nos. ES-C-SHP1, ES-C-SHP2, and ES-C-SHP3), while the sources are operating, for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
   i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 02D .2610 (EPA Method 9) for 12 minutes is below the limit given in Section 2.1 F.2.a. above.

   If the above-normal emissions are not corrected per i. above or if the demonstration in ii. above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

d. The results of the observations shall be maintained in a logbook (written or electronic form) on site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0614: COMPLIANCE ASSURANCE MONITORING

a. In order to avoid applicability of 15A NCAC 02D .0614, this source (ID No. ES-C-SHP3) shall discharge to the bin vent filter (ID No. CD-C-BH-5) pre-control emissions of less than 100 tons of particulate matter per consecutive 12-month period.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ in Section 3. If the results of this test are above the limit given in Section 2.1.F.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614.

Operational Restriction [15A NCAC 02Q .0508(f)]

c. In order to maintain particulate matter emissions below the limit in Section 2.1.F.3.a. above, the Permittee shall not operate this source (ID No. ES-C-SHP3) for more than 2,900 hours per consecutive 12-month period.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

d. The Permittee shall maintain daily records of operational hours of this source (ID No. ES-C-SHP3) in a logbook (written or electronic format), kept on-site, and made available to an authorized DAQ representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0614 if these records are not maintained or if the records indicate operational hours of this source in excess of the limit in Section 2.1.F.3.c, above.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall contain the following:
   i. The monthly operational hours of this source during each of the previous 17 months; and
   ii. The total operational hours of this source during each of the consecutive 12-month periods ending during the reporting period.

G. Four natural gas-fired humidification boilers (ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, and ES-C-HB2b)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	0.60 pounds per million Btu heat input (ID Nos. ES-C-HB1a and ES-C-HB1b only) 0.46 pounds per million Btu heat input (ID Nos. ES-C-HB2a and ES-C-HB2b only)	15A NCAC 02D .0503
Sulfur Dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible Emissions	20 percent opacity	15A NCAC 02D .0521

Regulated Pollutant	Limits/Standards	Applicable Regulation
PM, PM_{10}, $PM_{2.5}$, NOx, and VOCs	See Section 2.2.B.1.	15A NCAC 02D .0530
Hazardous Air pollutants	See Section 2.1.G.5.	MACT Subpart DDDDD
Odors	State-enforceable only See Section 2.2.B.2.	15A NCAC 02D .1806
Nitrogen Oxides	See Section 2.1.G.4.	15A NCAC 02D .1407 15A NCAC 02D .1414

1. 15A NCAC 02D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of natural gas that are discharged from these sources (ID Nos. ES-C-HB1a and ES-C–HB1b) into the atmosphere shall not exceed 0.60 pounds per million Btu heat input.
b. Emissions of particulate matter from the combustion of natural gas that are discharged from these sources (ID Nos. ES-C-HB2a and ES-C–HB2b) into the atmosphere shall not exceed 0.46 pounds per million Btu heat input.

Testing [15A NCAC 02Q .0508(f)]
c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Sections 2.1.G.1.a. and b. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]
d. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in these sources (ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, and ES-C–HB2b).

2. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these sources (ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, ES-and ES-C–HB2b) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]
b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.G.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]
c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources (ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, and ES-C–HB2b).

3. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources (ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, and ES-C–HB2b) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute

averaging periods may exceed 20 percent opacity not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.G.3.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in these sources (ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, and ES-C–HB2b).

4. 15A NCAC 02D .1407 BOILERS AND INDIRECT-FIRED PROCESS HEATERS and 15A NCAC 02D .1414 TUNE-UP REQUIRMENTS

a. Facilities with boilers with maximum heat input rate of less than or equal to 50 million Btu per hour shall comply with the annual tune-up requirements of 02D .1414. The Permittee shall maintain records of all tune-ups performed for each source according to 02D .1404. [15A NCAC 02D .1407]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1.G.4.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1407.

Monitoring [15A NCAC 02D .1414(b), 02Q .0508(f)]

c. When a tune-up to a boiler or indirect-fired process heater is required for compliance with this Section, the Permittee shall at least annually (on or by December 31st of each calendar year) and according to the manufacturer's recommendations:
   i. inspect each burner and clean or replace any component of the burner as required;
   ii. inspect the flame pattern and make any adjustments to the burner, or burners, necessary to optimize the flame pattern to minimize total emissions of NOx and carbon monoxide;
   iii. inspect the combustion control system to ensure proper operation and correct calibration of components that control the air to fuel ratio and adjust components to meet the manufacturer’s established operating parameters; and
   iv. inspect any other component of the boilers and make adjustments or repairs as necessary to improve combustion efficiency. The Permittee shall perform the tune-up according to a unit specific protocol approved by the Director. The Director (or designee) shall approve the protocol if it meets the requirements of this Rule. The protocol shall be submitted to the Regional Office for approval.

   If tune-ups and inspections are not conducted as per Sections 2.1.G.4.c.i. through iv. above, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .1407 [15A NCAC 02Q .0508(f)].

Recordkeeping [15A NCAC 02D.1414(d), 02Q .0508(f)]

d. The Permittee shall maintain records of tune-ups performed to comply with Rule .1404. The following information shall be included for each source:
   i. identification of the source;
   ii. the date and time the tune-up started and ended;
   iii. the person responsible for performing the tune-up; and
   iv. for boilers the checklist for inspection of the burner, flame pattern, combustion control system, and all other components of the boiler identified in the protocol, noting any repairs or replacements made;
   v. any stack gas analyses performed after the completion of all adjustments to show that the operating parameters of the boiler, have been optimized with respect to fuel consumption and output; at a minimum, these parameters shall be within the range established by the equipment manufacturer to ensure that the emission limitation for nitrogen oxides has not been exceeded; and

vi. any other information requested by the Director (or designee) to show that the boiler is being operated and maintained in a manner to minimize the emissions of nitrogen oxides.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1407 if these records are not maintained [15A NCAC 02Q .0508(f)]

e. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each annual tune-up and inspection along with any corrective actions taken; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1407 if these records are not maintained**.**

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit a summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 02D .1111: Maximum Achievable Control Technology

Applicability [40 CFR 63.7485, §63.7490(d), §63.7499(l)]

a. For the sources (ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, and ES-C–HB2b) (*existing source designed to burn gas 1 fuels with a heat input capacity greater than 5 million Btu per hour and less than 10 million Btu per hour*), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters" and Subpart A "General Provisions."

Definitions and Nomenclature [§63.7575]

b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.

40 CFR Part 63 Subpart A General Provisions [§ 63.7565]

c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Compliance Date [§ 63.56(b), 63.7510(e)]

d. The Permittee shall complete the initial tune up and the one-time energy assessment no later than May 20, 2019.

Notifications [§ 63.7545(e)(1), (8), §63.7530(e)

e. The Permittee shall submit a Notification of Compliance Status to the DAQ. The notification must be signed by a responsible official and submitted by July 19, 2019. The notification shall contain the following:
   i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, and description of the fuel(s) burned.
   ii. the following certification(s) of compliance, as applicable:
      (A) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR 63 Subpart DDDDD at the site according to the procedures in 40 CFR

§63.7540(a)(10)(i) through (vi)" and

(B) "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)" and is an accurate depiction of the facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.

Work Practice Standards [15A NCAC 02Q .0508(f)]

f. i. The Permittee shall conduct a tune-up of the boiler every two years as specified below.

(A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the Permittee may perform the burn inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown.

(B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown);

(D) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject; and

(E) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [§63.7500(a), (e), §63.7540(a)(10), (a)(11)]

(F) Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [40CFR 63.7515(d)]

(G) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [§63.7540(a)(13), 63.7515(g)]

(H) At all times, the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [§63.7500(a)(3)]

(I) The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if the requirements in Section 2.1.G.5.f. are not met.

Energy Assessment Requirements [15A NCAC 02Q .0508(f)]

g. The Permittee shall have a one-time energy assessment performed by a qualified energy assessor. The energy assessment must address the requirements in 40 CFR 63 Subpart DDDDD, Table 3, with the extent of the evaluation for items (a) to (e) in Table 3 appropriate for the on-site technical hours listed in 40 CFR 63.7575. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these requirements are not met.
[§63.7500(a)(1), Table 3]

Recordkeeping Requirements [15A NCAC 02Q .0508(f), §63.7555]

h. The Permittee shall keep the following:

i. a copy of each notification and report submitted to comply with this Subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status, or semiannual compliance report that has been submitted, according to the requirements in 40 CFR

63.10(b)(2)(xiv). [§ 63.7555(a)(1)]

ii. maintain on-site and submit, if requested by the Administrator, an annual report containing the information in paragraphs (A) through (C) below:
(A) the concentrations of carbon monoxide in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the source;
(B) a description of any corrective actions taken as a part of the tune-up; and
(C) the type and amount of fuel used over the 12 months prior to the annual adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit; and [§63.7540(a)(10)(vi)]

i. The Permittee shall for the associated records for Sections 2.1.G.5.f. through g.:
(A) maintain records in a form suitable and readily available for expeditious review;
(B) keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
(C) keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years. [§63.7560, 63.10(b)(1)]

j. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if records are not maintained as described in Section 2.1.G.5.h. and i.

Reporting Requirements [15A NCAC 02Q .0508(f)]

k. The Permittee shall submit compliance reports to the DAQ on a 2-year basis. The first report shall cover the period beginning on the May 20, 2019 and ending on December 31, 2020. The first report shall be postmarked on or before January 30, 2021. Subsequent 2-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the subsequent compliance reports postmarked on or before January 30 for the previous 24-month period. [§63.7550(a)]
i. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) The Permittee must use the appropriate electronic report in CEDRI for this Subpart. Instead of using the electronic report in CEDRI for this Subpart, the Permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this Subpart is not available in CEDRI at the time that the report is due, the Permittee must submit the report to the Administrator at the appropriate address listed in §63.13. The Permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [§63.7550(h)(3)]

l. The compliance report must contain the following information:
i. company name and address;
ii. process unit information, emissions limitations, and operating parameter limitations;
iii. date of report and beginning and ending dates of the reporting period;
iv. include the date of the most recent tune-up for each unit required according to Section 2.1 G. 5. f., include the date of the most recent burner inspection if it was not done as scheduled and was delayed until the next scheduled or unscheduled unit shutdown; and
v. statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [§63.7550(a) and (c), Table 9]

2.2- Multiple Emission Source(s) Specific Limitations and Conditions

A. Two optical waveguide laydown processes (ID Nos. ES-C-001 and ES-C-005) with gas-oxy firing with associated bagfilter (ID No. CD-C-BH-6) in series with one of two sieve tray scrubbers operating in

parallel (ID Nos. CD-C-HCL-5 or CD-C-HCL-6) in series with one of two sieve tray scrubbers operating in parallel (ID Nos. CD-C-CL-5 or CD-C-CL-6)

Glass drying operation (ID No. ES-C-003) with associated one of two packed tower scrubbers (ID Nos. CD-C-CL-3 or CD-C-CL-4)

Glass drying operation (ID No. ES-C-007) with associated two of three packed tower Cl scrubbers operating in parallel (ID Nos. CD-C-CL-8, CD-C-CL-9 or CD-C-CL-10)

Glass drying operation (ID No. ES-C-010) with associated two of three packed tower Cl scrubbers operating in parallel (ID Nos. CD-C-CL-8, CD-C-CL-9 or CD-C-CL-10)

Glass drying operation (ID No. ES-C-011) with associated two of three packed tower Cl scrubbers operating in parallel (ID Nos. CD-C-CL-8, CD-C-CL-9 or CD-C-CL-10)

Glass drying operation (ID No. ES-C-014) with associated two of three packed tower Cl scrubbers operating in parallel (ID Nos. CD-C-CL-8, CD-C-CL-9 or CD-C-CL-10)

Miscellaneous small source exhausts (including, but not limited to, laboratory hoods, the acid tank vent, emergency relief rupture discs, emergency vents, chlorine cylinder change out/header maintenance and bulk tank vents; ID No. ES-C-004) with associated one of two vertical spray chamber/venturi wet scrubbers (ID Nos. CD-C-HCL-3 and CD-C-HCL-4)

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic air pollutants	See Section 2.2.A.1. (ID Nos. ES-C-001, ES-C-003, ES-C-004, ES-C-005, ES-C-007, ES-C-010, ES-C-11, and ES-C-014)	15A NCAC 02D .1100

State-enforceable only

1. 15A NCAC 02D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. Pursuant to 15A NCAC 02D .1100 and in accordance with the completed application (1300117.19A) dated January 30, 2019, the following permit limits shall not be exceeded:

Stack ID No.	Emission Source ID No.	Emission Limits		
		Hydrogen Chloride (7647-01-0)	Chlorine (7782-50-5)	
		lb/hr	lb/hr	lb/day
EP-C-01	ES-C-003 ES-C-004	1.25	2.27	54.54
EP-C-02	ES-C-001 ES-C-005 ES-C-007 ES-C-010 ES-C-011 ES-C-014	6.46	6.08	145.92

Testing [15A NCAC 02Q .0308(a)(1)]

b. The Permittee shall demonstrate compliance with the emissions limits of hydrogen chloride and chlorine for stack (ID No. EP-C-01), while operating each of the sources (ID Nos. ES-C-003 and ES-C-004) and within 180 days of issuance of Air Quality Permit No. 08436T21.

The Permittee shall demonstrate compliance with the emissions limits of hydrogen chloride and chlorine for stack (ID No. EP-C-02), while operating each of the sources (ID Nos. ES-C-001, ES-C-005, ES-C-007, ES-C-010, ES-C-011, and ES-C 014), within 180 days of issuance of Air Quality Permit No. 08436T21, even if the source (ID No. ES-014) has not commenced operation.

The Permittee shall demonstrate compliance with the emissions limits of hydrogen chloride and chlorine for stack (ID No. EP-C-02), while operating each of the sources (ID Nos. ES-C-001, ES-C-005, ES-C-007, ES-C-010, ES-C-011, and ES-C 014), within 180 days of initial start-up of glass drying operation (ID No. ES-C-014).

Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ.

During this stack testing, the Permittee shall measure and document liquid injection rates, differential pressure drop across the scrubbers, and pH values of the liquid injected into the scrubbers associated with each of the emission sources, for ensuring compliance with hydrogen chloride and chlorine limits in Section 2.2.A.1.a. above.

Upon DAQ approval of stack test results for chlorine and hydrogen chloride, ensuring compliance with the limits in Section 2.2.A.1.a. above, the Permittee shall request an administrative amendment of its Title V permit, to revise the liquid injection rates of each scrubber included in Section 1 of the permit with the observed liquid injection rate for each scrubber during this stack testing.

Operational Requirements [15A NCAC 02D .1105]

c. To ensure compliance with the emission limits rates in Section 2.2.A.1.a. above, the Permittee shall not operate the emission sources listed therein, without the concurrent operation of the associated scrubbers. In addition, while the emission sources listed in Section 2.2 A.1.a. above are operating, the Permittee shall:
   i. Maintain hourly liquid injection rates in the associated scrubbers equal to or greater than the liquid injection rates listed in Section 1, above, for each associated scrubber;
   ii. Maintain hourly differential pressure drops across the associated scrubbers equal to or greater than the differential pressure drops recommended by the manufacturer or established by the Permittee via operational experience for each associated scrubber; and
   iii. Maintain hourly scrubber liquid pH values equal to or greater than the liquid pH values recommended by the manufacturer or established by the Permittee via operational experience for each associated scrubber.

Monitoring/Recordkeeping [15A NCAC 02D .1105]

d. The Permittee shall monitor hourly values of the three operational parameters listed in Sections 2.2 A.1.c.i, ii. and iii. above via an electronic parametric monitoring system that notifies the operator of any out-of-range values. The parametric monitoring system shall be installed, maintained, operated and calibrated as recommended by the monitoring system manufacturer.

e. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the scrubber manufacturer and/or established by the Permittee via operational experience. As a minimum, to ensure optimum control efficiency is maintained, the inspection and maintenance requirements shall include:
   i. Inspections of packing material, if applicable, to ensure proper packing depth and to check for clogging;

ii. Inspections of spray nozzles to detect clogging or corrosion damage of nozzles; and
iii. Inspections of chemical feed system, if applicable;
iv. Inspection, cleaning, and calibration of all associated instrumentation; and
v. Annual internal scrubber inspection for structural integrity.

f. The Permittee shall maintain daily records of the hourly values of the following operational parameters in a logbook (written or electronic format) on-site and made available to an authorized representative upon request:
i. Liquid injection rates in each scrubber;
ii. Differential pressures across each scrubber; and
iii. Scrubber liquid pH values for each scrubber.

g. The results of monitoring, and inspections and maintenance, conducted pursuant to Section 2.2 A.1.d. and e. above, shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
i. The date and time of each recorded action;
ii. The results of each inspection;
iii. The results of any maintenance performed on the scrubber and the parametric monitoring system; and
iv. Any variance from the inspections and maintenance requirements recommended by the equipment manufacturer and/or established by the Permittee via operational experience, if any, and corrections made.

Reporting [15A NCAC 02D .1105]

h. The Permittee shall submit the results of any maintenance performed on the scrubbers within 30 days of receipt of a written request by the DAQ.

i. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June.

j. The Permittee shall submit the stack EP-C-01 and EP-C-02 test results for hydrogen chloride and chlorine to the Mooresville Regional Office within 60 days of test completion.

B. Facility-Wide Affected Sources

The following table provides a summary of limits and standards for the emission source(s) describe above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter PM_{10} $PM_{2.5}$ Nitrogen Oxides (as NO_2) Volatile Organic Compounds	See Section 2.2.B.1.	15A NCAC 02D .0530
Odors	See Section 2.2.B.2.	15A NCAC 02D .1806
Toxic Air Pollutants	See Section 2.2.B.3.	15A NCAC 02Q .0711

1. 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The Permittee shall comply with emission limits, testing, monitoring, recordkeeping, and reporting requirements, in accordance with 15A NCAC 02D .0530, "Prevention of Significant Deterioration of Air Quality".

b. The Permittee shall comply with the following Best Available Control Technology (BACT) during all periods of operation including normal, start-up, shutdown, and malfunctions, pursuant to 15A NCAC 02D .0530(g):

EMISSION SOURCE	REGULATED NSR POLLUTANT	BACT	CONTROL DESCRIPTION
Optical Waveguide Laydown Processes			
ID Nos. ES-C-001 and ES-C-005	PM/PM_{10}/$PM_{2.5}$	0.0018 grain/dscf (filterable only) each, 3-run stack test average 0.00196 grain/dscf (both filterable and condensible) each, 3-run stack test average	Bagfilter
ID No. ES-C-002	PM/PM_{10}/$PM_{2.5}$	0.0018 grain/dscf (filterable only), 3-run stack test average 0.00186 grain/dscf (both filterable and condensible), 3-run stack test average	Bagfilter
ID Nos. ES-C-006 and ES-C-009	PM/PM_{10}/$PM_{2.5}$	0.0018 grain/dscf (filterable only) each, 3-run stack test average 0.00186 grain/dscf each (both filterable and condensible), 3-run stack test average	Bagfilter
ID No. ES-C-009	PM/PM_{10}/$PM_{2.5}$	0.0018 grain/dscf (filterable only), 3-run stack test average 0.00190 grain/dscf (both filterable and condensible), 3-run stack test average	Bagfilter
ID No. ES-C-012	PM/PM_{10}/$PM_{2.5}$	0.0018 grain/dscf (filterable only), 3-run stack test average 0.00190 grain/dscf (both filterable and condensible), 3-run stack test average	Bagfilter
ID Nos. ES-C-001 and ES-C-005	NOx	7.4 lbs/hr each, 3-run stack test average	Oxy-firing
ID No. ES-C-002	NOx	76.0 lb/hr, 3-run stack test average	Oxy-firing
ID No. ES-C-006 and ES-C-012	NOx	45.6 lb/hr each, 3-run stack test average	Oxy-firing
ID No. ES-C-009	NOx	152.0 lb/hr, 3-run stack test average	Oxy-firing
ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012	VOCs	Good combustion control* and use of natural gas	-
Glass Drying Operations			
ID Nos. ES-C-003, ES-C-011, and ES-C-014	PM/PM_{10}/$PM_{2.5}$	0.44 lb/hr (both filterable and condensible) each, 3-run stack test average	Packed Tower Scrubber
ID Nos. ES-C-007 and ES-C-010	PM/PM_{10}/$PM_{2.5}$	0.70 lb/hr (both filterable and condensible) each, 3-run stack test average	Packed Tower Scrubber
Miscellaneous Small Source Exhausts			

EMISSION SOURCE	REGULATED NSR POLLUTANT	BACT	CONTROL DESCRIPTION
ID No. ES-C-004	$PM/PM_{10}/PM_{2.5}$	0.44 lb/hr (both filterable and condensible), 3-run stack test average	Wet Scrubber
Emergency Generators			
ID Nos. ES-C-PG1a and ES-C-PG1b	$PM/PM_{10}/PM_{2.5}$	0.34 g/HP-hr (both filterable and condensible) each, 3-run stack test average	-
ID No. ES-C-PG2a	$PM/PM_{10}/PM_{2.5}$	0.42 g/HP-hr (both filterable and condensible), 3-run stack test average	Use of Tier 1 Certified Engine
ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d	$PM/PM_{10}/PM_{2.5}$	0.17 g/HP-hr (both filterable and condensible) each, 3-run stack test average	Use of Tier 2 Certified Engine
ID Nos. ES-C-PG1a and ES-C-PG1b	NOx	10.9 g/HP-hr each, 3-run stack test average	-
ID No. ES-C-PG2a	NOx	6.86 g/HP-hr, 3-run stack test average	Use of Tier 1 Certified Engine
ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d	NOx	4.53 g/HP-hr each, 3-run stack test average	Use of Tier 2 Certified Engine
ID Nos. ES-C-PG1a and ES-C-PG1b	VOCs	0.32 g/HP-hr each, 3-run stack test average	-
ID No. ES-C-PG2a	VOCs	0.97 g/HP-hr, 3-run stack test average	Use of Tier 1 Certified Engine
ID Nos. ES-C-PG2b, ES-C-PG2c, and ES-C-PG2d	VOCs	0.24 g/HP-hr each, 3-run stack test average	Use of Tier 2 Certified Engine
Acrylate Coating Process			
ID No. ES-C-ACP	VOCs	26.7 tons per consecutive 12-month period	Use of Low VOC Coating (less or equal to 10 percent by weight)
Soot Handling System			
ID No. ES-C-SHP1	$PM/PM_{10}/PM_{2.5}$	0.0018 grain/dscf (filterable only[**]), 3-run stack test average	Bagfilter
ID No. ES-C-SHP2	$PM/PM_{10}/PM_{2.5}$	0.0018 grain/dscf (filterable only[**]), 3-run stack test average	Bagfilter
ID No. ES-C-SHP3	$PM/PM_{10}/PM_{2.5}$	0.0018 grain/dscf (filterable only[**]), 3-run stack test average	Bagfilter
Boilers			
ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, and ES-C-HB2b	$PM/PM_{10}/PM_{2.5}$	Good combustion control[*] and use of natural gas	-
ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-	NOx	Good combustion control[*] and use of natural gas	-

EMISSION SOURCE	REGULATED NSR POLLUTANT	BACT	CONTROL DESCRIPTION
HB2a, and ES-C-HB2b			
ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, and ES-C-HB2b	VOCs	Good combustion control* and use of natural gas	-
Miscellaneous Maintenance and Cleaning Operations			
ID No. ES-C-Cleaning	VOCs	22.8 tons per consecutive 12-month period	Good housekeeping practices***
Insignificant Activities			
ID Nos. IES-C-1 through IES-C-14	$PM/PM_{10}/PM_{2.5}$	Good housekeeping practices***	-
ID Nos. IES-C-DGT1 through IES-C-DGT6	VOCs	Good housekeeping practices***	-
ID Nos. IES-C-FPDT1 and IES-C-FPDT2	VOCs	Good housekeeping practices***	
ID Nos. IES-C-FP1 and IES-C-FP2	$PM/PM_{10}/PM_{2.5}$ NOx VOCs	Good combustion control*	-
ID Nos. IES-C-GC1 through IES-C-GC5	VOCs	Good housekeeping practices***	-
ID No. IES-C-MFB	VOCs	Good housekeeping practices***	-
ID Nos. IES-C-MS1 through IES-C-MS3	VOCs	Good housekeeping practices***	-
ID No. IES-C-DC	VOCs	Good housekeeping practices***	-
ID Nos. IES-C-SV1 through IES-C-SV4	$PM/PM_{10}/PM_{2.5}$	Good housekeeping practices***	-
ID No. IES-C-FS	VOCs	Good housekeeping practices***	-
ID Nos. IES-C-CWT1 through IES-C-CWT5)	$PM/PM_{10}/PM_{2.5}$	Good operating practices	-

* Includes proper burner design and optimization of combustion air systems to achieve good combustion efficiency.
** Condensible particulates are not expected from the source.
*** Includes measures, as applicable, for preventing formation of and controlling fugitive emissions, minimizing amounts of cleaners, use of water-based cleaners where practicable, storing of all material, including waste material, containing volatile organic compounds in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use, cleaning up spills as soon as possible following proper safety procedures, and storing wipe rags in closed containers.

c. The Permittee shall comply with the following emissions limits for optical waveguide laydown processes (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012) and glass drying

operations (ID Nos. ES-C-003, ES-C-007, ES-C-010, ES-C-011, and ES-C-014), pursuant to the requirements in 15A NCAC 02D .0530(g), specifically, compliance with National Ambient Air Quality Standards and PSD increments[1]:

Emission Source	Pollutant	Type of Demonstration	Emission Limit (lb/hr)		
			1-hr average	24-hour average	Annual average
ES-C-002, ES-C-003, and ES-C-004 (Stack EP-C-01)	$PM_{2.5}$	NAAQS	NA	1.77	1.77
		Class II Increment	NA	0.435	0.435
ES-C-001, ES-C-005, ES-C-006, ES-C-007, ES-C-009, ES-C-011, and ES-C-014 (Stack EP-C-02)	$PM_{2.5}$	NAAQS	NA	4.37	4.37
		Class II Increment	NA	3.37	3.37
ES-C-009 and ES-C-012 (Stack EP-C-03)	$PM_{2.5}$	NAAQS	NA	0.82	0.82
		Class II Increment	NA	0.82	0.82
ES-C-002 (Stack EP-C-01)	NO_2	NAAQS	76.0	NA	42.2
		Class II Increment	NA	NA	42.2
ES-C-001, ES-C-005, ES-C-006, and ES-C-009 (Stack EP-C-02)	NO_2	NAAQS	166.9	NA	99.2
		Class II Increment	NA	NA	99.2
ES-C-009 and ES-C-012 (Stack EP-C-03)	NO_2	NAAQS	91.2	NA	50.6
		Class II Increment	NA	NA	50.6

d. For conducting readiness testing, the Permittee shall be restricted to operating only one emergency generator/fire pump (ID Nos. ES-C-PG1a, ES-C-PG1b, ES-C-PG2a, ES-C-PG2b, ES-C-PG2c, ES-C-PG2d, IES-C-FPDT1, and IES-C-FPDT2) at any one time and only between the hours of 9 AM to 5 PM, pursuant to the requirements in 15A NCAC 02D .0530(g), specifically, compliance with National Ambient Air Quality Standards and PSD increments[2]:

e. **Testing** [15A NCAC 02Q .0508(f)]

i. The Permittee shall demonstrate compliance with the emissions limits for $PM/PM_{10}/PM_{2.5}$ in Section 2.2.B.1.b. above for each optical waveguide laydown process (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, and ES-C-009), each glass drying operation (ID Nos. ES-C-003, ES-C-007, ES-C-010, and ES-C-011), and miscellaneous small source exhausts (ID No. ES-C-004), within 180 days of issuance of Air Quality Permit No. 08436T21.

The Permittee shall demonstrate compliance with the emissions limits for $PM/PM_{10}/PM_{2.5}$ in Section 2.2.B.1.c. above at each stack for optical waveguide laydown processes (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, and ES-C-009), glass drying operations (ID Nos. ES-C-003, ES-C-007, ES-C-010, and ES-C-011), and miscellaneous small source exhausts (ID No. ES-C-004), by summing the emissions rates (determined through emission source testing) of these sources, as applicable in Section 2.2.B.1.c. above, within 180 days of issuance of Air Quality Permit No. 08436T21.

[1] No PSD increments currently exist for NO_2 (1-hour average) for Class I Area, Class II Area, or Class III Area, in accordance with §51.166(c) "Ambient Air Increments and Other Measures".
[2] Id.

ii. The Permittee shall demonstrate compliance with the emissions limits for $PM/PM_{10}/PM_{2.5}$ in Section 2.2.B.1.b. above for optical waveguide laydown process (ID No. ES-C-012), within 180 days of its start-up.

The Permittee shall demonstrate compliance with the emissions limits for $PM/PM_{10}/PM_{2.5}$ in Section 2.2.B.1.c. above at the stack for optical waveguide laydown process (ID No. ES-C-012), by summing the emissions rates (determined through emission source testing) of this source (ID No. ES-C-012) with the source (ID No. ES-009), within 180 days of start-up of the source (ID No. ES-C-012).

iii. The Permittee shall demonstrate compliance with the emissions limits for $PM/PM_{10}/PM_{2.5}$ for glass drying operation (ID No. ES-C-014) in Section 2.2.B.1.b. above, within 180 days of its start-up.

The Permittee shall demonstrate compliance with the emissions limits for $PM/PM_{10}/PM_{2.5}$ in Section 2.2.B.1.c. above at the stack for glass drying operation (ID No. ES-C-014), by summing the emissions rates (determined through emission source testing) of this source (ID No. ES-C-014) with the sources (ID Nos. ES-C-001, ES-C-005, ES-C-006, ES-C-007, ES-C-009, and ES-C-011), within 180 days of start-up of the source (ID No. ES-C-014).

iv. The Permittee shall demonstrate initial compliance with the emissions limits for NOx in Section 2.2.B.1.b. above for each optical waveguide laydown process (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, and ES-C-009), within 180 days of issuance of Air Quality Permit No. 08436T21.

v. The Permittee shall demonstrate initial compliance with the emissions limits for NOx in Section 2.2.B.1.b. above for optical waveguide laydown process (ID No. ES-C-012), within 180 days of its start-up.

vi. The Permittee shall subsequently demonstrate compliance with the emissions limits for NOx in Section 2.2.B.1.c. above at the stack for optical waveguide laydown processes (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012) on an annual basis (no more than 13 months after the previous performance test) for five years. The Permittee may petition the DAQ for less frequent compliance demonstration (testing) for NOx under this paragraph after completion of five annual tests and each demonstrating compliance with the emissions limits in Section 2.2.B.1. c. above.

vii. Each stack test shall be conducted in accordance with General Condition JJ in Section 3.

viii. If the above required stack tests are not conducted or the results of any stack tests exceed limits in Section 2.2.B.1.b. or c. above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

f. For $PM/PM_{10}/PM_{2.5}$ emissions from optical waveguide laydown processes (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012) and glass drying operations (ID Nos. ES-C-003, ES-C-007, ES-C-010, ES-C-011, and ES-C 014), and miscellaneous small source exhausts (ID No. ES-C-004), the Permittee shall comply with the monitoring and recordkeeping requirements in Section 2.1.A.1.c. and d., Section 2.1.B.1.c. and d., and 2.1.C.1.c. above, respectively. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the monitoring and recordkeeping requirements in Section 2.1.A.1.c. and d. above, Section 2.1.B.1.c. and d. above, or Section 2.1.C.1.c. above, are not complied with.

g. For acrylate coating process (ID No. ACP) and miscellaneous maintenance and cleaning operations (ID No. ES-C-Cleaning), the Permittee shall determine VOC emissions per month based upon the amount of solvent or cleaner(s) used per month and VOC content of each solvent or cleaner. The Permittee shall

assume that the VOC content is either 100 percent or obtain from the vendor of the material information confirming the VOC content included in the material safety data sheet (MSDS) or use formulation data. If the vendor of the material provides a range of VOC content for such material, the Permittee shall use the highest value of the range to calculate the VOC emissions unless the DAQ approves the site-specific data (such as Method 24 analysis) showing that another value in the range is more appropriate. Calculations and the total amount of VOC emissions for each of these sources shall be recorded monthly in a logbook (written or electronic format), and emissions totaled for each consecutive 12-month period using VOC emissions for the current month and the previous 11-months period. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the 12-month rolling VOC emissions exceed the BACT for either acrylate coating process (ID No. ACP) or miscellaneous maintenance and cleaning operations (ID No. ES-C-Cleaning) in Section 2.2.B.1.b. above, or the VOC emissions are not recorded.

h. For $PM/PM_{10}/PM_{2.5}$ emissions from soot handling system sources (ID Nos. ES-C-SHP1, ES-C-SHP2, and ES-C-SHP3), the Permittee shall comply with the monitoring and recordkeeping requirements in Section 2.1.F.1.c. and d. above. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the monitoring and recordkeeping requirements in 2.1.F.1.c. and d. above are not complied with.

i. The Permittee shall keep records of operating hours for each month, and time and date for each readiness testing, for emergency generators and fire pumps (ID Nos. ES-C-PG1a, ES-C-PG1b, ES-C-PG2a, ES-C-PG2b, ES-C-PG2c, ES-C-PG2d, IES-C-FPDT1, and IES-C-FPDT2). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if any readiness testing occurs before 9 AM or after 5 PM, or readiness testing is conducted on more than one emergency generator/fire pump at any one time, or operating hours for any emergency generator/fire pump exceeds 500 hours per any rolling 12-month period, or these records are not kept.

j. No monitoring/record keeping shall be required to comply with the NOx BACT and other emissions limits for optical waveguide laydown processes (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-012) in Section 2.2.B.1.b. and c., respectively.

k. No monitoring/record keeping shall be required to comply with the VOC BACT in Section 2.2.B.1.b. above, for optical waveguide laydown processes (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012).

l. No monitoring/record keeping shall be required to comply with the $PM/PM_{10}/PM_{2.5}$, NOx, and VOC BACTs, as applicable, in Section 2.2.B.1.b. above, for boilers (ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, and ES-C-HB2b) and insignificant activities (ID Nos. IES-C-1 through IES-C-14, IES-C-DGT1 through IES-C-DGT6, IES-C-FPDT1, IES-C-FPDT2, IES-C-FP1, IES-C-FP2, IES-C-GC1 through IES-C-GC5, IES-C-MFB, IES-C-MS1 through IES-C-MS3, IES-C-DC, IES-C-SV1 through IES-C-SV4, IES-C-FS, and IES-C-CWT1 through IES-C-CWT5).

Reporting [15A NCAC 02Q .0508(f)]

m. The Permittee shall submit a written report of the results of each performance test required in Section 2.2.B.1.e. above, before the close of business on the 60th day following the completion of the performance test.
n. For acrylate coating process (ID No. ACP) and miscellaneous maintenance and cleaning operations (ID No. ES-C-Cleaning), the Permittee shall report VOC emissions for each consecutive 12-month period.
o. Reporting requirements for optical waveguide laydown processes (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-C-012), glass drying operations (ID Nos. ES-C-003, ES-C-007, ES-C-010, ES-C-011, and ES-C 014), and miscellaneous small source exhausts (ID No. ES-C-004), in Section 2.1.A.1.e., Section 2.1.B.1.e., and Section 2.1.C.c. above, respectively, shall be sufficient to ensure compliance with the $PM/PM_{10}/PM_{2.5}$ requirements in 15A NCAC 02D .0530.

p. Reporting requirements for soot handling system sources (ID Nos. ES-C-SHP1, ES-C-SHP2, and ES-C-SHP3) in Section 2.1.F.1.e. above shall be sufficient to ensure compliance with the $PM/PM_{10}/PM_{2.5}$ requirements in 15A NCAC 02D .0530.
q. No reporting shall be required for timings of readiness testing or operating hours for each emergency generators and fire pumps (ID Nos. ES-C-PG1a, ES-C-PG1b, ES-C-PG2a, ES-C-PG2b, ES-C-PG2c, ES-C-PG2d, IES-C-FPDT1, and IES-C-FPDT2) to ensure compliance with $PM/PM_{10}/PM_{2.5}$, NOx, and VOC requirements in 15A NCAC 02D .0530.
r. No reporting shall be required to ensure compliance with both NOx and VOC requirements in 15A NCAC 02D .0530 for optical waveguide laydown processes (ID Nos. ES-C-001, ES-C-002, ES-C-005, ES-C-006, ES-C-009, and ES-012).
s. No reporting shall be required to ensure compliance with $PM/PM_{10}/PM_{2.5}$, NOx, and VOC requirements, as applicable, in 15A NCAC 02D .0530, for boilers (ID Nos. ES-C-HB1a, ES-C-HB1b, ES-C-HB2a, and ES-C-HB2b) and insignificant activities (ID Nos. IES-C-1 through IES-C-14, IES-C-DGT1 through IES-C-DGT6, IES-C-FPDT1, IES-C-FPDT2, IES-C-FP1, IES-C-FP2, IES-C-GC1 through IES-C-GC5, IES-C-MFB, IES-C-MS1 through IES-C-MS3, IES-C-DC, IES-C-SV1 through IES-C-SV4, IES-C-FS, and IES-C-CWT1 through IES-C-CWT5).
t. The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

State-enforceable only

2. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

State-enforceable only

3. 15A NCAC 02Q .0711: EMISSION RATES REQUIRING A PERMIT

a. Pursuant to 15A NCAC 02Q .0711 “Emission Rates Requiring a Permit,” for each of the below listed toxic air pollutants (TAPs), the Permittee has made a demonstration that actual emissions from the facility (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions), do not exceed the Toxic Permit Emission Rates (TPERs) listed in 15A NCAC 02Q .0711. The facility shall be operated and maintained in such a manner that emissions of any listed TAPs from the facility (excluding those sources exempt under 15A NCAC 02Q .0702 "Exemptions), including fugitive emissions, will not exceed TPERs listed in 15A NCAC 02Q .0711.
    i. A permit to emit any of the below listed TAPs shall be required for this facility if actual emissions from all sources will become greater than the corresponding TPERs.
    ii. PRIOR to exceeding any of these listed TPERs, the Permittee shall be responsible for obtaining a permit to emit TAPs and for demonstrating compliance with the requirements of 15A NCAC 02D.1100 "Control of Toxic Air Pollutants.”
b. In accordance with the approved application, the Permittee shall maintain records of operational information demonstrating that the TAP emissions do not exceed the TPERs as listed below:

TPERs				
Pollutant (CAS Number)	**Carcinogens lb/yr**	**Chronic Toxicants lb/day**	**Acute Systemic Toxicants lb/hr**	**Acute Irritants lb/hr**
Benzene (71-43-2)	8.1			
p-dichlorobenzene (106-46-7)				16.8
Formaldehyde (50-00-0)				0.04
n-Hexane (110-54-3)		23		
Toluene (108-88-3)		98		14.4
Xylene (1330-20-7)		57		16.4

2.3 - Other Applicable Requirements

A. Facility-Wide Affected Sources

1. 15A NCAC 02D .2100: RISK MANAGEMENT PROGRAM SECTION 112 (r) OF THE CLEAN AIR ACT - PREVENTION OF ACCIDENTAL RELEASES

a. The Permittee is subject to Section 112(r) of the Clean Air Act and shall comply with all applicable requirements in accordance with 40 CFR Part 68 [15A NCAC 02D .2101(a)].

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(h)]

b. The Permittee shall develop, implement and submit a Risk Management Plan to EPA pursuant to 40 CFR 68.150 as specified in 40 CFR 68.10. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .2100 if the Permittee does not develop, implement and submit a Risk Management Plan to EPA.

SECTION 3 - GENERAL CONDITIONS (version 5.3, 08/21/2018)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
   The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
   The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
   The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
   The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
   The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements
   Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
   a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
   b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
      i. the changes are not a modification under Title I of the Federal Clean Air Act;
      ii. the changes do not cause the allowable emissions under the permit to be exceeded;
      iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
      iv. the Permittee shall attach the notice to the relevant permit.
   c. The written notification shall include:
      i. a description of the change;
      ii. the date on which the change will occur;
      iii. any change in emissions; and
      iv. any permit term or condition that is no longer applicable as a result of the change.
   d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
3. Off Permit Changes [15A NCAC 02Q .0523(b)]
   The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]
"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
    a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
        i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
            - name and location of the facility;
            - nature and cause of the malfunction or breakdown;
            - time when the malfunction or breakdown is first observed;
            - expected duration; and
            - estimated rate of emissions;
        ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
        iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
    a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B **Other Requirements under 15A NCAC 02D .0535**
The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]
The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and

that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]
This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:
1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]
A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]
1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]
The Director may terminate, modify, or revoke and reissue this permit if:
1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]
Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]
1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

   Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(4)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.

3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)** – FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:

i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.

b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
   a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
   b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
   c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
    a. a description of the change at the facility;
    b. the date on which the change will occur;
    c. any change in emissions; and
    d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound